

# ELECTROPHORESIS OF DNA KIT NO. 3

References : ELECDSC, ELECDSCSG



## "Digestion and location of restriction sites"

Proposed activity:

Digestion of phage lambda DNA by fast-acting XhoI, EcoRI and HindIII enzyme (5 minutes) (made by students)

8-well agarose gel electrophoresis of phage lambda and lambda phage DNA digested with XhoI, EcoRI and HindIII

Interpretations of the results using the instructions to find the size of DNA bands obtained and locate the restriction sites

Composition:

To make 4 gels of 25 ml

- 1.6 g agarose
- 100 ml of TAE 10 buffer x pH =8.3 to dilute 10 times to get 1,000 ml of buffer
- 106 µl of lambda phage DNA
- 8µl of XhoI restriction enzyme with rapid digestion
- 8µl of EcoRI restriction enzyme with rapid digestion
- 8µl of HindIII restriction digest enzyme

- 100 µl of fast-acting restriction enzyme buffer
- 250 µl of deposit blue  
Technical and educational instructions available on our website.

Necessary material:

DNA electrophoresis tank (for immersed gel)

70-110 V, 20my generator

Water Bath or Microwave

- Gloves
- Micropipettes from 5 to 50µl and adapted cones
- Conservation: 3 months
- DNA, restriction enzymes and digestion buffer: in the freezer
- Colour (protected from light), TAE buffer, sterile water: in the refrigerator

Reference	Tank	Dye
ELECDSC	standard	Azure A
ELECDSCSG	BlueGel	SafeGreen